



# Authorisation for placing in service



# Who is involved ?

**Manufacturer / Applicant**

**Notified Body**

**verification against EU-specifications**

**Designated Body**

**verification against national rules**

**NSA**

**grants the authorisation for placing in service**



**The task** of the notified body responsible for the EC verification of a subsystem **shall begin at the design stage and cover the entire manufacturing period through to the acceptance stage** before the subsystem is placed in service



EC DIR  
2008/57

Art. 18-2



# 38 HS + 44 CR Notified Bodies



- Delta Rail NoBoI Ltd 1127\*
- Praxis Systems Ltd 1157\*
- Bombardier Transportation Notified Body 1156
- Correl Rail Ltd 1144\*
- Railway Approvals 1125\*
- Interfleet Technology Ltd 1133\*
- Lloyd's Register 0038\*
- Mott MacDonald Ltd 1124\*
- Atkins NoBo 1143
- Halcrow Rail Approvals 1675\*
- Network Rail Infrastructure



- KEMA RTC 0930\*
- Luxcontrol Netherland B.V. 1010\*
- NedTrain Consulting B.V. 0967\*
- Railcert B.V. 0941\*
- Lloyd's Register 0676\*



- SINTEF 1278\*
- Scandpower 2058



- Det Norske Veritas 1347\*
- TUV 1638\*



- LLC Baltic centre 1696



- Vanaheim 1807\*

\* HS & CR



- VUD As 1358\*



- SNCH 0499



- CNTK 1467\*
- Trans Dozor Tech 1468\*
- Movares 1736\*
- IP ST 1940\*



- Belgorail 1615\*



- TECHNIA 2106
- VERITAS 2129
- SIQM 1304
- ZAG 1404



- APNCF 2101



- ADAF 0986\*



- RINA SPA 0474\*
- SCIRO 1782\*
- TUV 1936\*
- ITALCERTIFER 1960\*
- Consorzio SciroTuv 1287



- EBC 0893\*



- PQRS 2126



- CERTIFER 0942\*
- VERITAS 0062



- Arsenal Research 0894\*
- Bahn Consult 1602\*



- AFER 1867\*



- VUZ Institute 1714\*
- Technicky AZ 1020\*

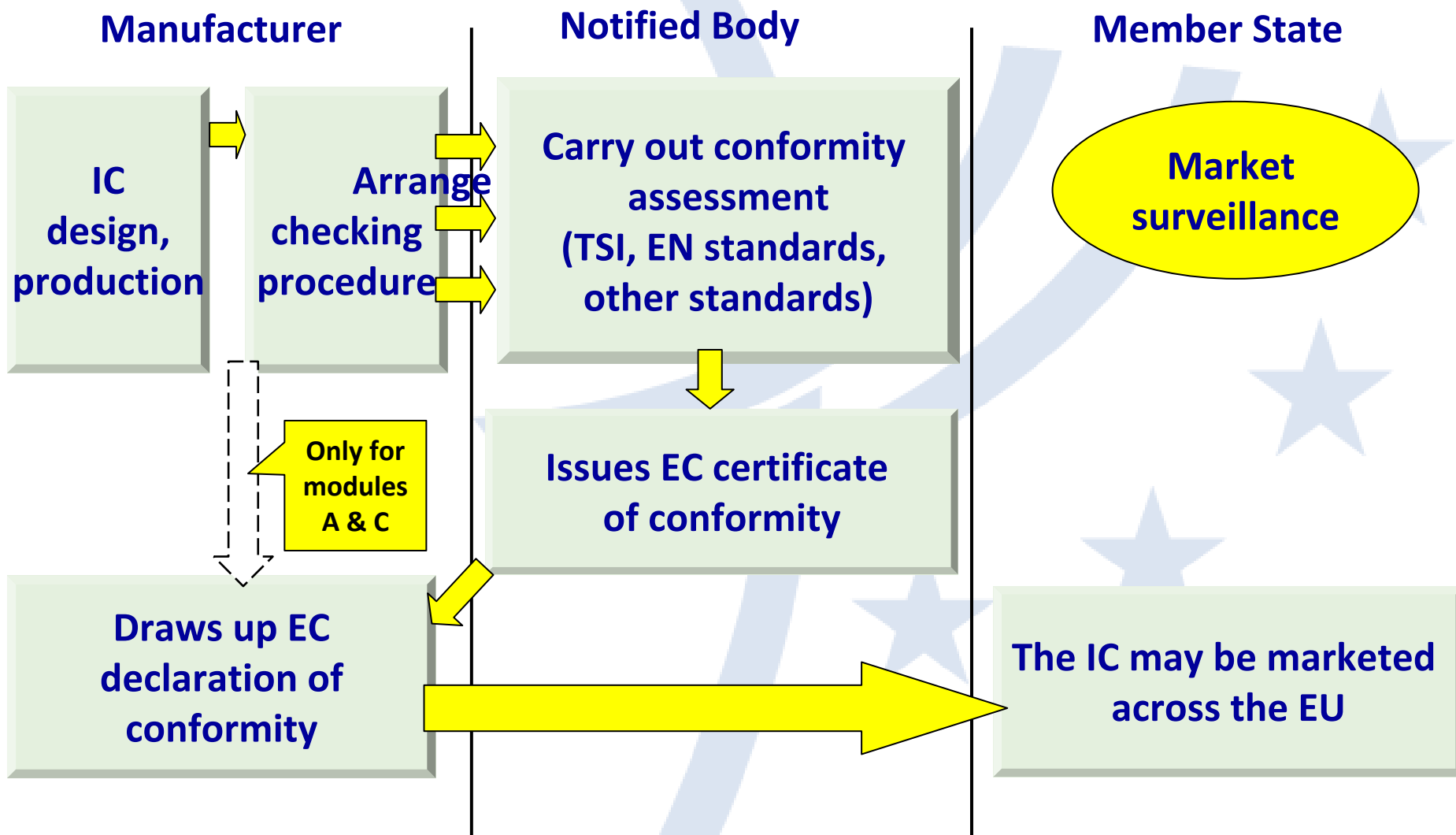


# Assessment of Interoperability Constituents

- **The Manufacturer**  
chooses the NoBo and the modules of assessment
- **The NoBo (if required by the modules)**  
assesses the IC  
issues a certificate of conformity
- **The Manufacturer**  
issues the EC declaration of conformity  
places the IC on the EU market

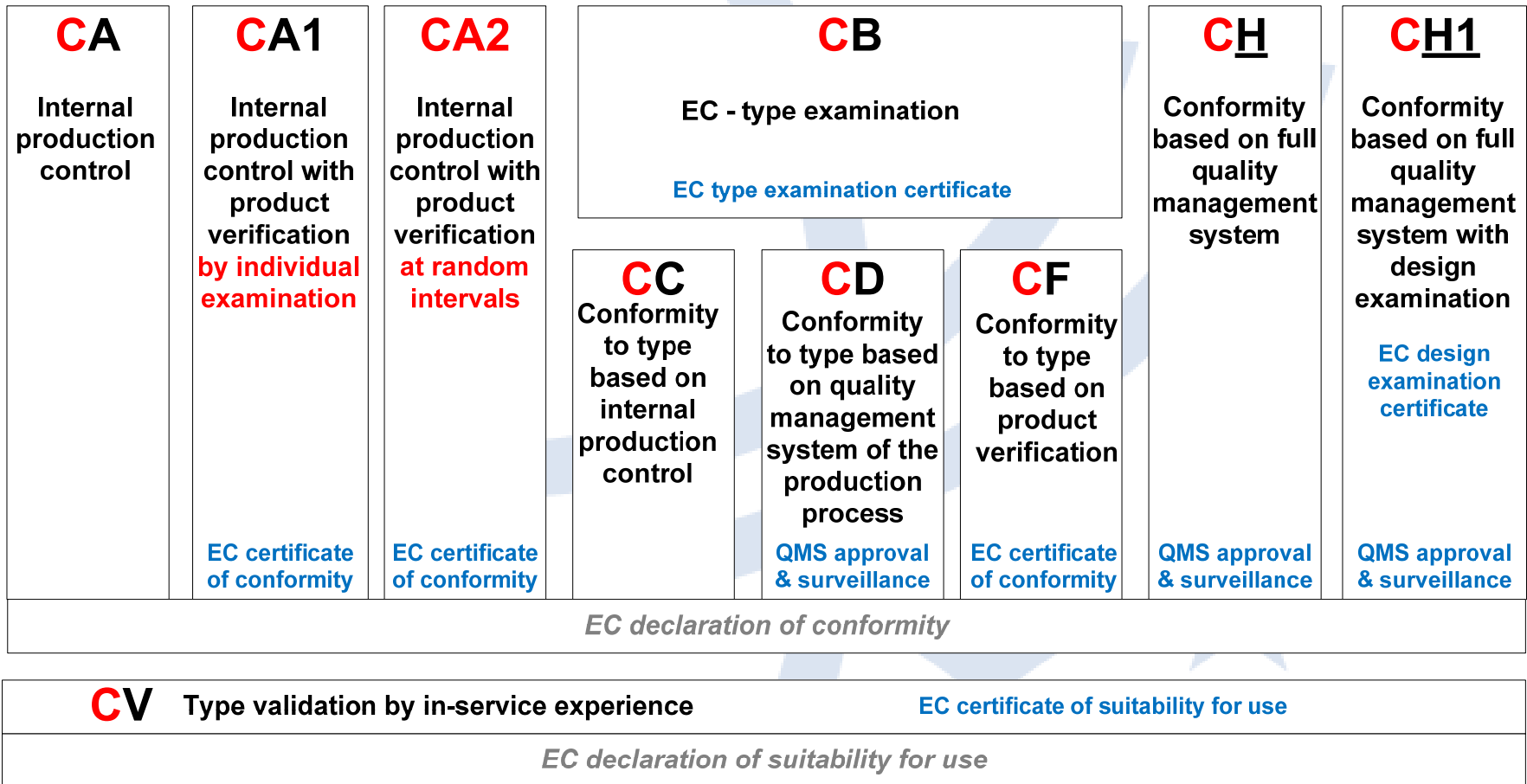


# Conformity assessment of ICs





# Structure of new modules for ICs



Documents issued by notified bodies  
 Documents issued by manufacturers



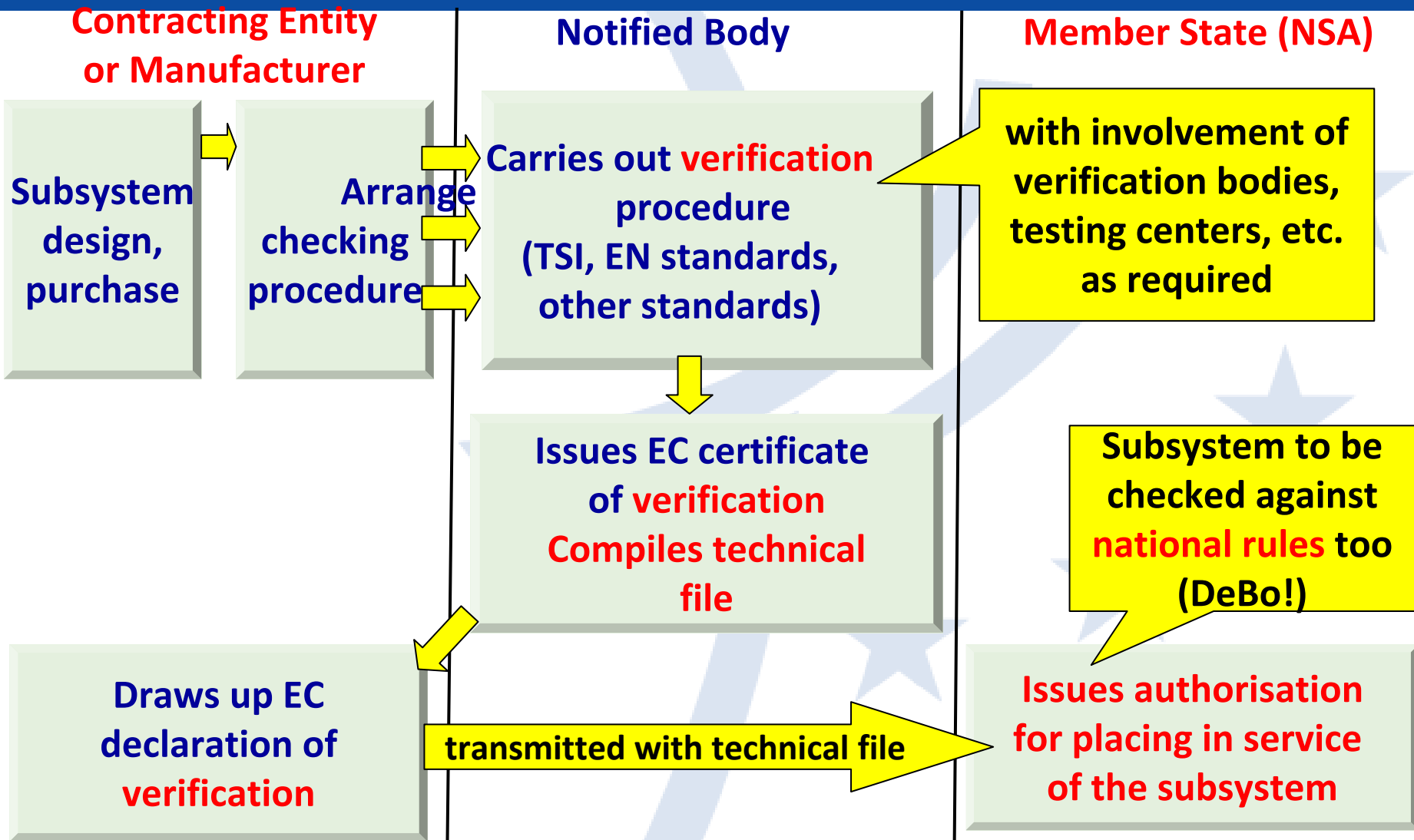
# Assessment of Sub-systems

- **The Contracting Entity**
  - chooses the NoBo and the modules of assessment
- **The NoBo**
  - carries out the EC Verification
  - compiles the technical file
  - issues a certificate of conformity
- **The Contracting Entity**
  - issues the EC declaration of verification
- **The DeBo**
  - carries out the verification against notified national rules
- **The NSA**
  - authorises the placing in service



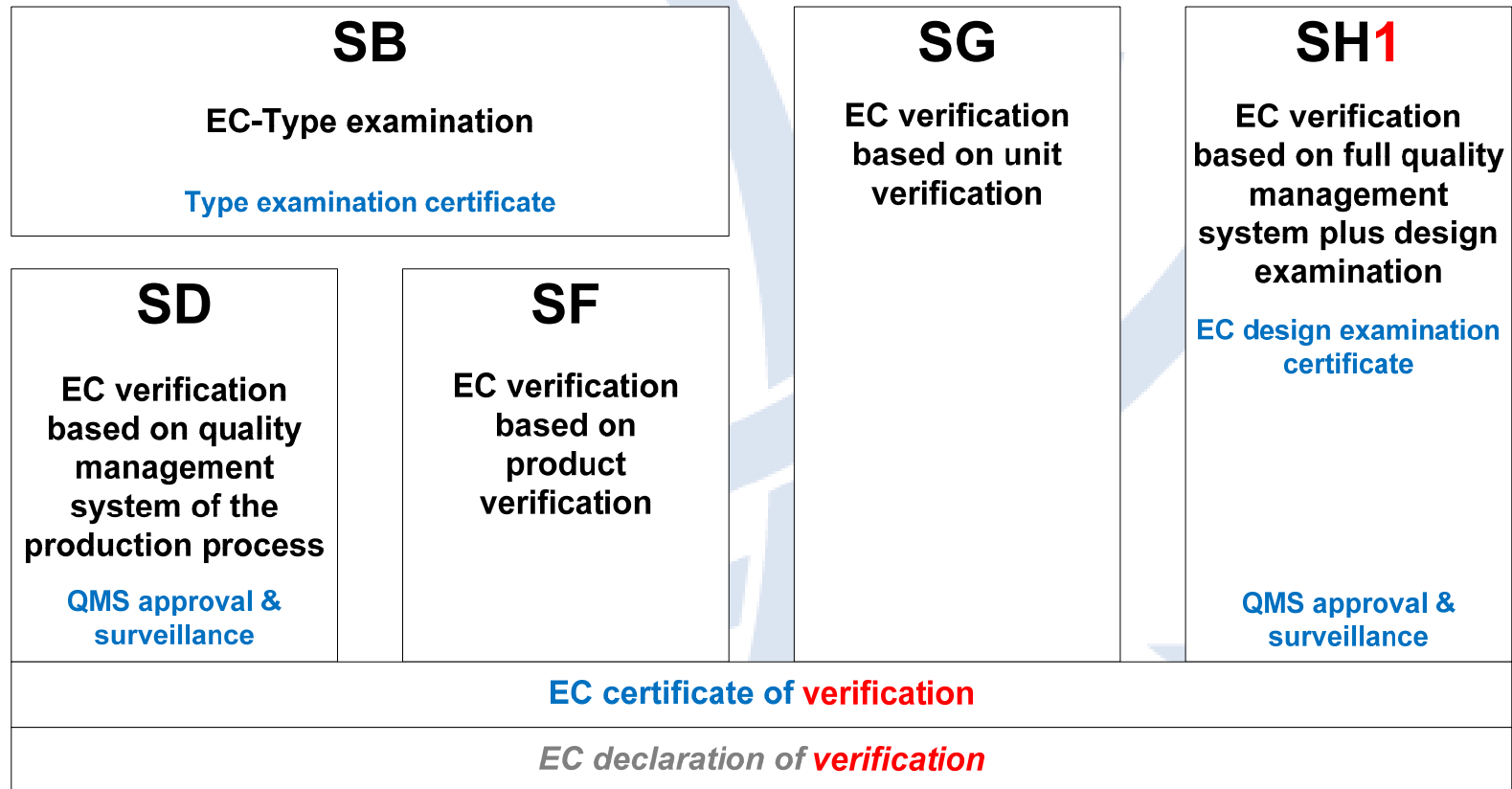


# Subsystem verification procedure





# Structure of new modules for subsystems



**Documents issued by notified bodies**  
*Documents issued by **applicant***  
*(contracting entity or **manufacturer**)*



# “DV 29”

## COMMISSION RECOMMENDATION

on the authorisation for the placing in service of  
structural subsystems and vehicles under  
Directive 2008/57/EC



# How DV29 is to be used

**It does not have the same legal status as the Directive**

**BUT**

- **If an entity complains that a MS or NSA is not acting according to the Directive then the adjudicating authority will refer to DV29**
- **The Commission will use DV29 to check conformity of MS implementation of 2008/57**
- **All Member States agreed to it**

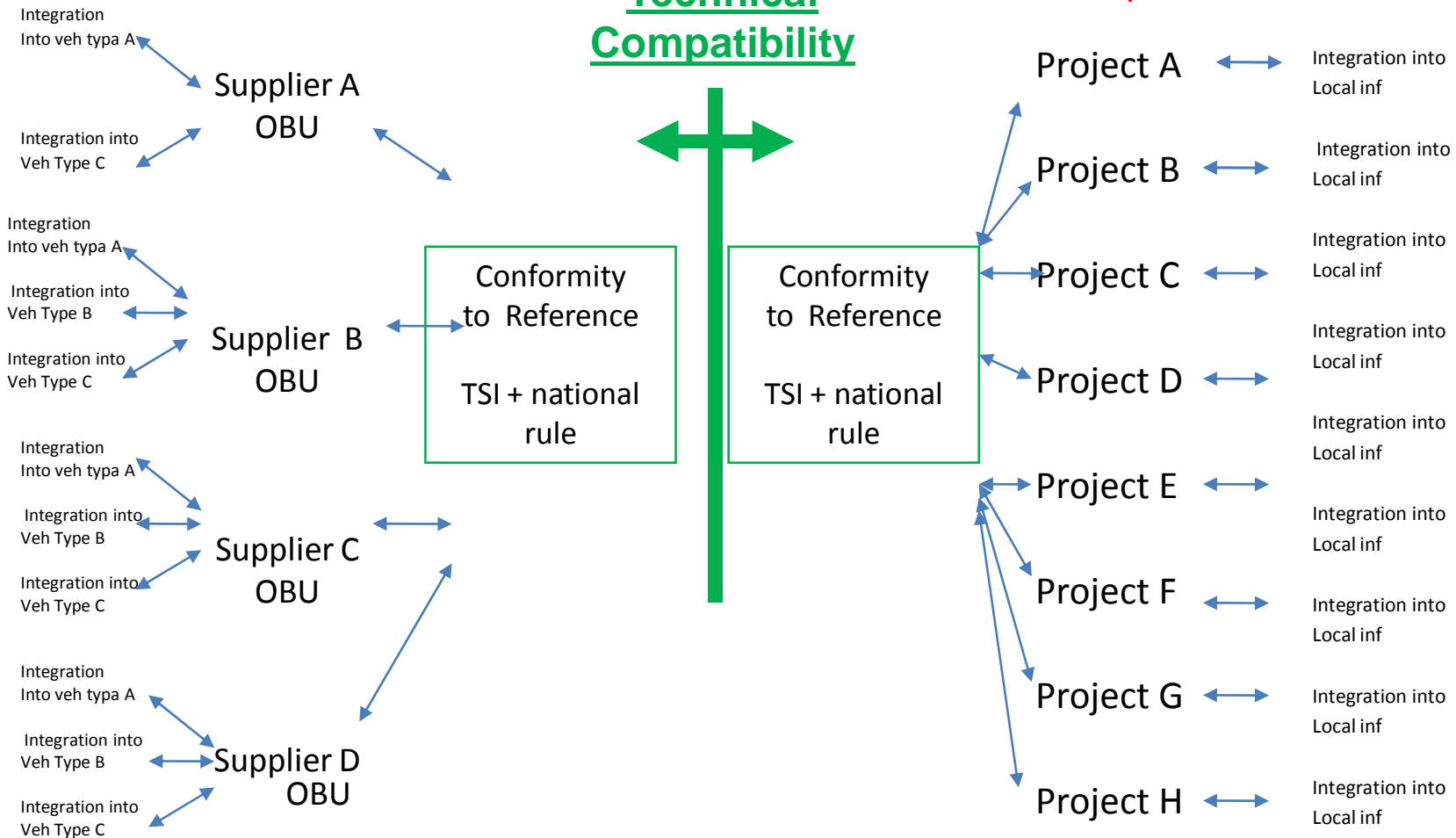
# Managing Shared Systems

## Vehicles

## Network

### Veh authorisation

### Subsystem authorisation



For each infrastructure project 1 compatibility check (TSI )plus local integration

For each OBU design one IC check to TSI and MS national rules

For each loco type / OBU combination check integration veh to OBU



# Scope of Authorisation

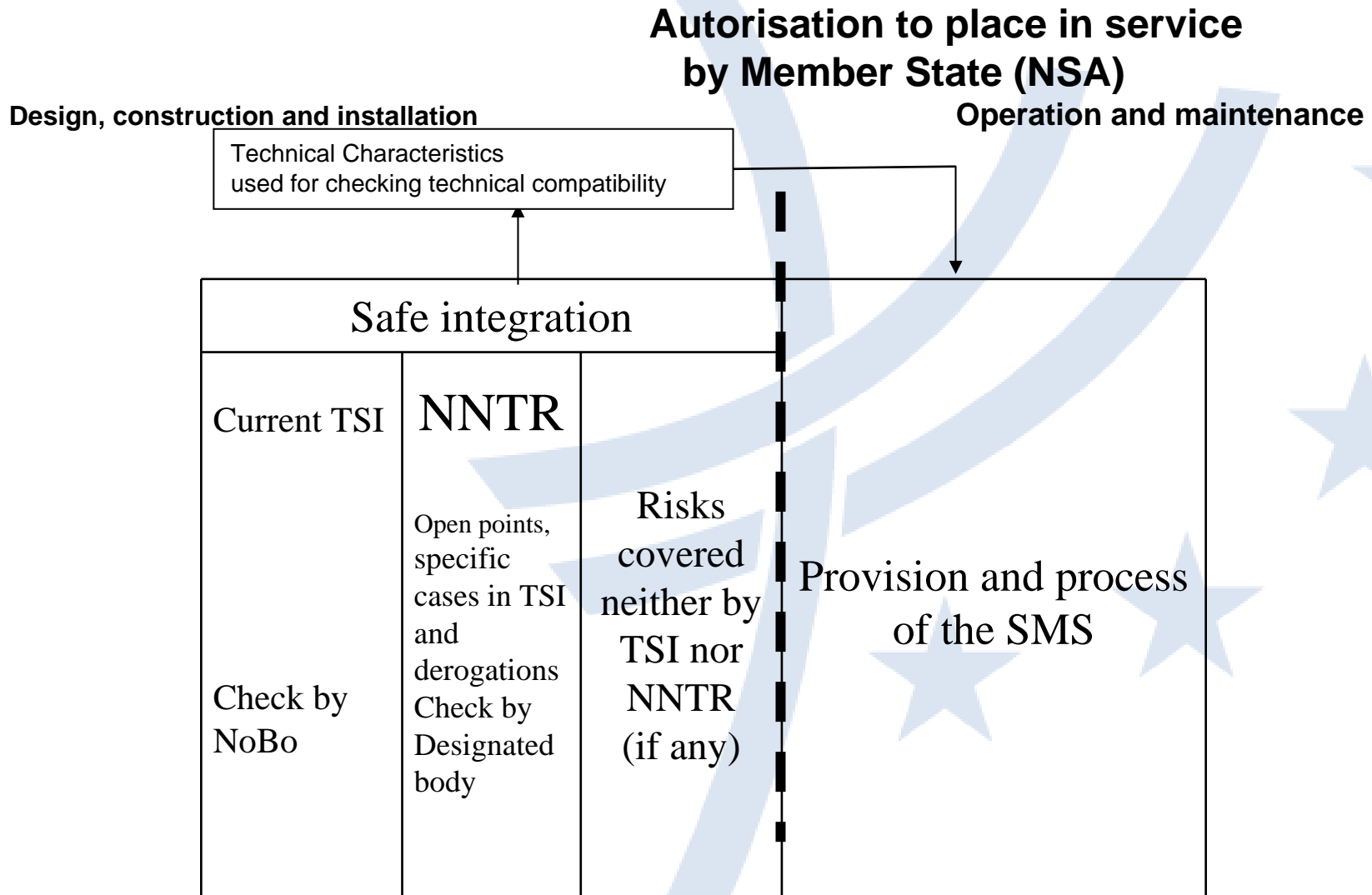


# Authorisation v Operation

- **Authorisation of Vehicle (= an Initial “Snapshot”)**
  - Vehicle design operating state *“meets the essential requirements when integrated into the system”*
  - Conforms to rules defining how to meet the ERs (TSI/NNTR). In particular:-
    - Subsystems safely integrated
    - Technically Compatible with the network (TSI+NNTR)
- **Operation of trains (= an ongoing process using vehs)**
  - RU’s Safety Management System
  - Maintenance assures ongoing conformity with essential requirements
  - Relies upon ability of each route to support the train (route compatibility) and maintenance by IM of that ability.



# Separation of Authorisation from Operation







# Scope of Authorisation to Place in Service

## Interop Directive

*'placing in service' means all the operations by which a subsystem or a vehicle is put into its design operating state (Definition (q)).*

## Safety Directive

*each infrastructure manager and railway undertaking shall be made responsible for its part of the system and its safe operation, including supply of material and contracting of services, vis-à-vis users, customers, the workers concerned and third parties (SD Art 4)*



# Scope of Authorisation to Place in Service

## Conclusions:

1. Authorisation relates to the design operating state (ie the initial design and construction) of the subsystem/vehicle
2. Authorisation is independant of operation/use - many entities may obtain authorisation for a vehicle (eg manufacturer, owner) without knowing who will operate it or on which routes.
3. Only RUs with a safety certificate may operate trains (using vehicles). Their capability to do this is covered by the SMS and covered by their safety certificate. It is NOT relevant to the authorisation process



# Geographical Scope of Authorisation

*“Each Member State shall authorise placing in service of those structural subsystems constituting the rail system which are located or operated in its territory (Art 15) “*

**Conclusion: Authorisation is required for all parts of the rail system**

*“Before being used on a network, a vehicle shall be authorised to be placed in service by the national safety authority which is competent for this network, unless otherwise provided for in this Chapter (Art 21.1)”*

**Observations:**

- Authorisation may be obtained by a manufacturer. (independant of RU)
- No new authorisation if vehicle used on different routes

**Conclusion: Vehicle Authorisation is for a network according to the rules for that network**



# What is a Network?

## A Network – some factors to consider

- A geographically connected set of routes
- Supervised by one Safety Authority
- Managed by a single Infrastructure Manager
- With one set of Technical Specifications / Rules

## How many networks in a country?

*“Steps should be taken to avoid a situation where Member States adopt new national rules or undertake projects that increase the diversity of the present system”*



# Maintaining the Essential Requirements (incl Technical Compatibility)

## **The conformity with the TSIs and NNTR (demonstrated at authorisation) must be maintained**

- for a network by the IMs (variable track gauge or loading gauge infrastructure is not allowed)
- for a vehicle by the RU (variable track or kinematic gauge vehicles not allowed)

**An RU/IM must, via its SMS, ensure that it does not operate any vehicle/network whose conformity with the essential requirements (as described in the TSI and NNTR) has not been maintained**

- operation of vehicles/networks with unknown maintenance limits is not allowed because it compromises compatibility



## **Comes into play when it is necessary to have common procedures of operation and traffic management**

- Not relevant (no checks) for authorisation (right hand side of the dotted red line)
- Functionalities for operation (eg visibility, horns braking requirements) are covered by structural TSIs



## Aircraft certification

- Independent of which airline will use the plane
  - Not related to the ability of any airline to maintain the plane
  - Not related to the ability of any airline's pilots to fly the plane

## Independent from particular routes or airports

- Airport operators make public the nature of their infrastructure (runway length etc)
- Airlines make sure they fly to airports that are compatible with their planes



# Some Comparisons- Road System

## Vehicles

- are certified independantly from drivers or haulage companies
- are certified independent of which routes they use

## Common Technical Rules, Roles and Responsibilities apply

- New highways are built and maintained to “standard dimensions” (eg bridge height)
- Road signs are standardised nationally /at EU level (not project by project)
- Highway authorities make public the nature of their non standard infrastructure (eg low bridges) and maintain them to published limits
- Management systems of bus companies and freight hauliers ensure that their drivers only drive vehicles on routes that are compatible with their busses/lorries





# Mutual Recognition



# Mutual Recognition

- **Member States may choose to require Additional authorisation for vehicles already authorised in another MS**
- **On additional authorisation Member States may only check against**
  - Specific cases
  - Rules relating to compatibility with the network
    - (but only if they are B and C rules in the Ref Doc)
- **For non TSI conform vehicles the NSA must not call into question the checks of first authorisation unless they can demonstrate a substantial safety risk to the applicant**
  - (And even then not if related to an A rule in the Ref Doc)



# The Reference Document (of rules used when TSIs do not apply)

- The “list of parameters to be checked for authorisation” came into force 19<sup>th</sup> July 2010
- All MS have supplied their National Reference Documents (lists of rules applied for vehicle authorisation for each of these parameters and equivalences with other MSs rules) most now on ERA website
- Commission Decision on the Reference Document October 2010 gives 12months to notify these rules



# Grandfather's Rights (1)

- **Art 23 and 25 (Additional authorisation) require that**
  - For TSI conform vehs only technical compatibility with the network and specific cases may be checked
  - For Non TSI-Conform the NSA may not call into question checks carried out as part of the first authorisation save (i.e. except) where the NSA is able to demonstrate a significant safety risk



# Grandfather's Rights (2)

- **This means that**
  - Grandfathers rights apply to additional authorisations in respect of parameters not relating to network-vehicle compatibility or specific cases
    - ◆ Because to allow a 20 years old national vehicle to run on grandfathers rights but to insist that an identical vehicle applying for additional authorisation to conform to today's rules would be discriminatory
- **Except where to do so would create a significant safety risk (e.g. if the safety level of the old foreign vehicle is much lower than would be allowed for same age national vehicles)**
  - Because to do so would discriminate in the opposite direction and might lower the overall level of safety



**Thank you for your attention**

**Questions?**

